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Application No. 10/776,072  
Amendment dated July 28, 2006  
Reply to Office Action of June 29, 2006

JUL 28 2006

Docket No.: 65858-0028

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Original) A classification system for generating a classification of target information obtained with a sensor, said classification system comprising:

a grouping subsystem, said grouping subsystem providing for a plurality of classes and a plurality of groups, wherein each said group includes at least one said class, and wherein at least one said group includes more than one said class; and

a selection subsystem, wherein said selection subsystem provides for generating said classification using said target information, wherein said classification is one said group from said plurality of groups.

2. (Original) The system of claim 1, wherein said selection subsystem further provides for a prior determination, wherein the generating of said classification by said selection subsystem is influenced by said prior determination.

3. (Original) The system of claim 1, wherein said selection subsystem further provides for a event flag, wherein the generating of said classification by said selection subsystem is influenced by said event flag.

4. (Original) The system of claim 3, wherein said target information is not used to set said event flag.

5. (Original) The system of claim 1, wherein said plurality of groups further includes:  
a first group, said first group comprising a first class; and  
a second group, said second group comprising said first class and a second class.

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6. (Original) The system of claim 5, wherein said plurality of groups further includes a third group, said third group comprising said first class, said second class, and a third class.
7. (Original) The system of claim 1, wherein said plurality of groups and said plurality of classes are predefined before said target information is obtained.
8. (Original) The system of claim 1, said selection subsystem further providing for a belief metric, wherein said belief metric influences the classification generated by said selection subsystem.
9. (Original) The system of claim 1, said selection subsystem further providing for a plausibility metric, wherein said plausibility metric influences the classification generated by said selection subsystem.
10. (Original) The system of claim 1, said selection subsystem further providing for a plurality of probability metrics, wherein each group in said plurality of groups is associated with at least one probability metric from said plurality of probability metrics, and wherein said plurality of probability metrics influences said classification generated by said selection subsystem.
11. (Original) The system of claim 1, said selection subsystem further providing for an incoming probability mass and a past probability mass, wherein said incoming probability mass and said past probability mass influence the classification generated by said selection subsystem.
12. (Original) The system of claim 1, said selection subsystem further providing for:
  - a plurality of incoming probability mass metrics, wherein each said group is associated with at least one said incoming probability mass metric;
  - a plurality of past probability mass metrics, wherein each said group is associated with at least one said past probability mass metric;

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a plurality of belief metrics, wherein each said group is associated with at least one said belief metric;

a plurality of plausibility metrics, wherein each said group is associated with at least one said plausibility metric; and

wherein at least one said probability mass metric, at least one past probability mass metric, at least one said belief metric, and at least one said plausibility metric influence the classification generated by said selection subsystem.

13. (Original) The system of claim 1, further comprising vehicle information, occupant information, a safety restraint application, and a disablement decision, wherein the target information relates to said occupant information located in said vehicle, wherein said selection subsystem system is configured to make said classification accessible to said safety restraint application, and wherein said classification influences said disablement decision.

14. (Original) The system of claim 13, further comprising an event and a reset history flag, wherein said reset history flag is set in accordance with said event, and wherein said selection subsystem generates said classification using said reset history flag.

15. (Original) The system of claim 14, further comprising information concerning an opening of a door, wherein said event is said opening of said door.

16. (Original) The system of claim 13, wherein said plurality of classes includes an RFIS, a child, and an adult.

17. (Original) The system of claim 1, wherein the target information is captured from an image-based sensor.

18. (Original) The system of claim 1, further comprising an enhancement subsystem and an enhanced classification, wherein said enhancement subsystem generates said enhanced

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classification from said classification, and wherein said enhanced classification includes only one said class.

19. (Original) The system of claim 18, further comprising a historical attribute, wherein said historical attribute influences said enhanced classification generated by said enhancement subsystem.

20. (Original) The system of claim 1, further comprising a belief metric and a plausibility metric, wherein said selection subsystem generates said classification using said belief metric and said plausibility metric.

21. (Original) The system of claim 1, said selection subsystem further providing for a belief metric and a plausibility metric, wherein said metrics influence the classification generated by said selection subsystem.

22. (Original) A classification system for generating a classification from a plurality of target attributes obtained with a sensor, said classification system comprising:

a processor, said processor providing for:

- a classification;
- a plurality of historical attributes;
- a plurality of groups;
- a plurality of classes;
- a plurality of belief metrics; and
- a plurality of plausibility metrics;

wherein each said group includes at least one said class;

wherein at least one said group includes more than one said class;

wherein said classification is one group within said plurality of groups; and

wherein said processor identifies said using at least one said historical attribute, at least one said belief metric, and at least one said plausibility metric.

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23. (Original) The classification system of claim 22, further comprising an event and a reset history flag, wherein said processor is configured to set said reset history flag in response to said event, wherein said processor deletes at least one said historical attribute upon the setting of said reset history flag to a value of yes.

24. (Original) The system of claim 23, further comprising an opening of a door, wherein said event is said opening of said door.

25. (Original) The classification system of claim 22, further comprising a disablement decision concerning a safety restraint application, wherein said sensor is said video camera, wherein said plurality of classes includes a child, a RFIS, and an adult, and wherein said classification is configured to be accessed by said safety restraint application in generating said disablement decision.

26. (Original) The system of claim 22, wherein said plurality of groups includes:  
a first group, said first group comprising a first class;  
a second group, said second group comprising said first class and a second class;  
a third group, said third group comprising said first class, said second class, and a third class;  
and  
a fourth group, said fourth group comprising said first class, said second class, said third class, and a fourth class.

27-33. (Canceled)

34. (New) A classification system for generating a classification of target information obtained with a sensor, said classification system comprising:

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a grouping subsystem, said grouping subsystem providing for a plurality of classes and a plurality of groups, wherein each said group includes at least one said class, and wherein at least one said group includes more than one said class;

a selection subsystem, wherein said selection subsystem provides for generating said classification using said target information, wherein said classification is one said group from said plurality of groups;

wherein said selection subsystem further provides for a prior determination, wherein the generating of said classification by said selection subsystem is influenced by said prior determination;

wherein said selection subsystem further provides for a event flag, wherein the generating of said classification by said selection subsystem is influenced by said event flag;

said selection subsystem further providing for a belief metric, wherein said belief metric influences said classification generated by said selection subsystem;

said selection subsystem further providing for a plausibility metric, wherein said plausibility metric influences said classification generated by said selection subsystem;

said selection subsystem further providing for a plurality of probability metrics, wherein each group in said plurality of groups is associated with at least one probability metric from said plurality of probability metrics, and wherein said plurality of probability metrics influences said classification generated by said selection subsystem; and

said selection subsystem further providing for an incoming probability mass and a past probability mass, wherein said incoming probability mass and said past probability mass influence said classification generated by said selection subsystem.